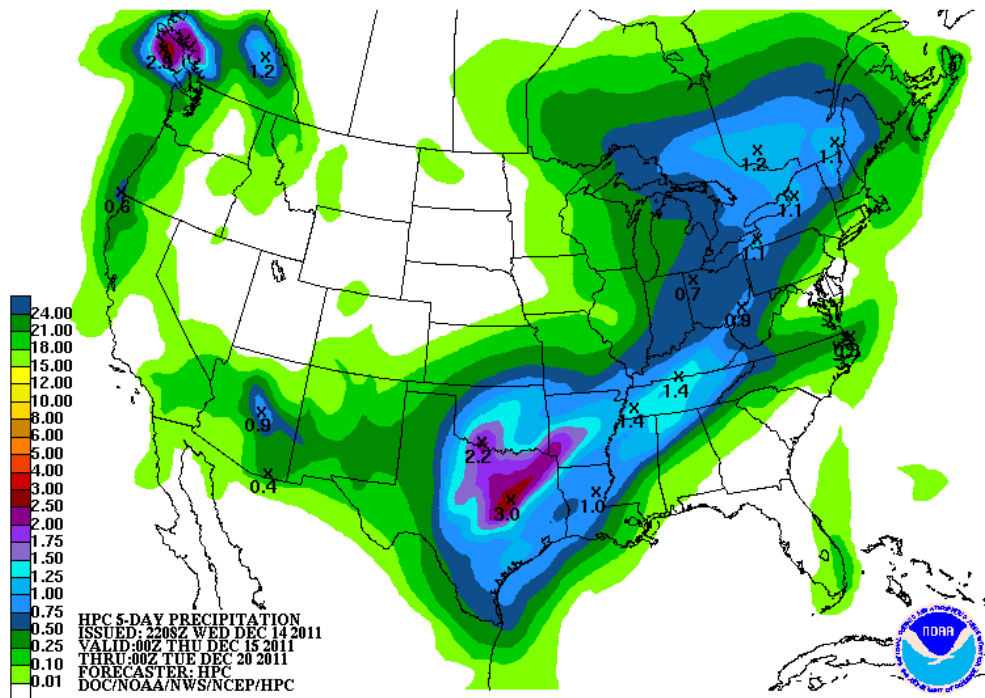


Where is La Niña?

Prepared by NWS Missoula - December 15, 2011

[NOAA's National Weather Service Climate Prediction Center](#) has been forecasting a La Niña phase of the El Niño Southern Oscillation ([ENSO](#)) index for the northern hemisphere winter of 2011-2012. Indeed, La Niña conditions (anomalously cool surface water temperatures) have been present across much of the eastern Pacific Ocean near the equator since about August 1, 2011. This indicates that La Niña is occurring. More information about the evolution of these patterns is available [HERE](#).

However, the weather since late November over the Conterminous United States (CONUS) has not been what we expect with La Niña. Instead, La Niña pattern typically brings frequent storms moving across the Northern Rocky Mountains, leading to a healthy mountain snowpack. Beginning in late November 2011, the storm track has steered around the Northern Rockies, favoring the desert southwest states and the south-central CONUS, including drought stricken Texas.



5 day precipitation forecast for Dec. 15-20, 2011

So, when will La Niña weather patterns arrive? It is important to remember that the forecast for La Niña represents a *seasonal* forecast, for conditions expected for the December to March winter season. At this point, in early December, it is too early to determine the ultimate accuracy of the La Niña seasonal forecast. At some point late in December or early in 2012, the weather will likely begin to show more characteristics of a La Niña pattern, including frequent storms, adding to the mountain snowpack of Montana and northern Idaho.

What would signal such a change in the weather? One possible phenomenon that could trigger the expected change may be another large scale feature known as the “Arctic Oscillation”, or AO. The AO has been anomalously positive since the second half of November 2011. This is in contrast to the onset of winter in late 2010 (also a La Niña condition winter), when the AO was very negative for December 2010 and much of January 2011. So, perhaps when a change in the Arctic Oscillation occurs in the coming weeks and months, the La Niña pattern

will begin to influence the day to day weather in Western Montana and Northern Idaho.

Finally, the NOAA Climate Prediction Center seasonal forecasts for January 2012 through March 2012 are presented below.

